

# **DEFENSE INFORMATION SYSTEMS AGENCY**

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 $\frac{\text{IN REPLY}}{\text{REFER TO:}}$  Joint Interoperability Test Command (JTE)

25 Apr 12

## MEMORANDUM FOR DISTRIBUTION

SUBJECT: Extension of the Special Interoperability Test Certification of the Avaya Aura S8800 and Hewlett Packard (HP) DL-360 G7 with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19391)

References: (a) DoD Directive 4630.05, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)," 5 May 2004

- (b) CJCSI 6212.01E, "Interoperability and Supportability of Information Technology and National Security Systems," 15 December 2008
- (c) through (j), see Enclosure
- 1. References (a) and (b) establish the Joint Interoperability Test Command (JITC), as the responsible organization for interoperability test certification.
- 2. The Avaya Aura S8800 and HP DL-360 G7 servers with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19391), hereinafter referred to as the System Under Test (SUT) was originally certified as a Local Session Controller (LSC) (TN 1009101) and a Small End Office (SMEO) (TN 1020101), Reference (c). The vendor submitted a Desktop Review (DTR) to add the Dell R610 and Core Systems M223 servers to the SUT. JITC conducted testing using product requirements derived from the Unified Capabilities Requirements (UCR), Reference (d) – (f), and test procedures, Reference (g). The SUT's certification status will be evaluated during operational deployment. Any new discrepancy noted in the operational environment will be evaluated for impact on the existing certification. These discrepancies will be adjudicated to the satisfaction of Defense Information Systems Agency (DISA) via vendor Plan of Actions & Milestones that address all new critical discrepancies within 120 days of identification. JITC does not certify any other configurations, features, or functions, except those cited in this memorandum, or authorized by the Program Management Office. This certification extension expires upon changes that affect interoperability, but no later than three years from 20 April 2011; which is the date the DISA Certifying Authority (CA) provided a positive Recommendation.
- 3. JITC approves the extension of this certification for DTR 11 submitted to add the Dell R610 and Core Systems M223 servers to the SUT. JITC analysis determined that the new server platforms are functionally identical to the certified S8800 & HP DL-360 G7 servers and that past JITC experience with functionally identical hardware present minimal risk to interoperability. Therefore, no additional testing was required. The Information Assurance (IA) posture has not changed; the original IA approval applies to this DTR.

4. Table 1 lists the interfaces, Capability Requirements (CR), Functional Requirements (FR), and component status of the SUT. The threshold CR/FRs for LSCs and SMEOs, with the exception of SMEO NM requirements which are found in UCR 2008, Section 5.2.8, are established by Sections 5.3.2, 5.3.4, 5.3.5, and 5.4 of Reference (d) - (f) and were used to evaluate the interoperability of the SUT.

**Table 1. SUT Interface Interoperability Status** 

Interface	Critical	UCR Reference	Threshold CR/FR <sup>1</sup>	Status	Remarks <sup>2</sup>
			Line Interfaces	l.	
10Base-X	Yes	5.3.2.6.3	1, 2, 3, 4, 10, 13, and 16	Certified	SUT met threshold CRs/FRs for IEEE 802.3i and 802.3j. Applies to PEIs (voice) and Softphone (voice).
100Base-X	Yes	5.3.2.6.3	1, 2, 3, 4, 10, 13, and 16	Certified	SUT met threshold CRs/FRs for IEEE 802.3u with the SUT PEIs.
1000Base-X	No	5.3.2.6.3	1, 2, 3, 4, 10,13, and 16	Not Tested	This interface is not offered by the SUT PEIs.
2-wire analog	Yes	5.3.2.6.1.6	1, 2, 3, 4, 10, and 13	Certified	SUT met threshold CRs/FRs for 2- wire analog interfaces.
ISDN BRI <sup>3</sup>	No	5.3.2.6.1.8	1, 2, 3, 4, 10, and 13	Certified	SUT met threshold CRs/FRs for BRI interface with the.
Digital Proprietary	No	5.2	1, 2, 3, 4, 10, and 13	Certified	SUT met threshold CRs/FRs for Digital Proprietary interface.
			<b>External Interfaces</b>		
10Base-X	No	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, and 16	Certified	Met threshold CRs/FRs for IEEE 802.3i and 802.3j for the AS-SIP trunk.
100Base-X	No	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, and 16	Certified	Met threshold CRs/FRs for IEEE 802.3u for the AS-SIP trunk.
1000Base-X	No	5.3.2.4.2	1, 2, 3, 6, 7, 8, 10, 11, 13, 15, and 16	Not Tested	This interface is not offered by the SUT.
			<b>External Interfaces</b>		
ISDN T1 PRI ANSI T1.619a	Yes	5.3.2.4.3	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs. This interface provides legacy DSN and TELEPORT connectivity.
ISDN T1 PRI NI-2	Yes	5.3.2.4.3	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs. This interface provides PSTN connectivity.
T1 CCS7 ANSI T1.619a	No	5.3.2.12.9	2, 3, 7, 8, 10, and 13	Not Tested	This interface is not offered by the SUT.
T1 CAS (DTMF³, MFR1)	No	5.3.2.12.11	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs. This interface provides legacy DSN and TELEPORT connectivity with DTMF (Standard, ABCD) and Multifrequency R1 digit formats.
E1 CAS	No (LSC), Yes (SMEO)	5.3.2.12.11	2, 3, 7, 8, 10, and 13	Certified	Met threshold CRs/FRs and met interface criteria for T1 CAS with MLPP.
E1 PRI <sup>4</sup> ITU-T Q.955.3	No	5.3.2.12.10	2, 3, 7, 8, 10, and 13	Not Tested	Although this interface is offered by the SUT, it was not tested. This interface is not certified by JITC and is not required for an LSC.
E1 PRI <sup>4</sup> ITU-T Q.931	No	5.3.2.12.10	2, 3, 7, 8, 10, and 13	Not Tested	Although this interface is offered by the SUT, it was not tested. This interface is not certified by JITC and is not required for an LSC.

**Table 1. SUT Interface Interoperability Status (continued)** 

Interface	Critical	UCR Reference	Threshold CR/FR <sup>1</sup>	Status	Remarks <sup>2</sup>
Network Management Interfaces					
10Base-X	No <sup>5</sup>	5.3.2.4.4 5.3.2.7.2.8	16, 17, and 18 <sup>6</sup>	Certified	Met threshold CRs/FRs. Verified via LoC.
100Base-X	No <sup>5</sup>	5.3.2.4.4 5.3.2.7.2.8	16, 17, and 18 <sup>6</sup>	Certified	Met threshold CRs/FRs. Verified via LoC.

## NOTES:

- 1. The SUT high-level CR and FR ID numbers depicted in the Threshold CRs/FRs column can be cross-referenced in Table 2. These high-level CR/FR requirements refer to a detailed list of requirements provided in Enclosure 1, Reference (d) (f).
- 2. Detailed information pertaining to open TDRs and associated operational impacts is in Enclosure 1, Reference (d) (f).
- 3. This interface is required only for a SMEO.
- 4. This interface is required for only for Europe deployment.
- 5. The SUT must provide a minimum of one of the following NM interfaces: 10Base-X or 100Base-X.
- 6. These NM CRs and FRs are required only for SMEO.

LEGEND:			
10Base-X	10 Mbps Ethernet	ITU-T	International Telecommunication Union -
100Base-X	100 Mbps Ethernet		Telecommunication Standardization Sector
1000Base-X	1000 Mbps Ethernet	JITC	Joint Interoperability Test Command
802.3i	10 Mbps twisted pair media for 10Base-X networks	LoC	Letter of Compliance
802.3j	10 Mbps fiber media for 10Base-X networks	LSC	Local Session Controller
802.3u	100BASE-TX, 100BASE-T4, 100BASE-FX Fast	Mbps	Megabits per second
	Ethernet at 100 Mbps with auto negotiation	MLPP	Multi-Level Precedence and Preemption
ANSI	American National Standards Institute	NI-2	National ISDN Standard 2
AS-SIP	Assured Services Session Initiation Protocol	NM	Network Management
BRI	Basic Rate Interface	PEI	Proprietary End Instrument
CAS	Channel Associated Signaling	PRI	Primary Rate Interface
CCS7	Common Channel Signaling 7	PSTN	Public Switched Telephone Network
CR	Capability Requirement	Q.931	Signaling Standard for ISDN
DSN	Defense Switched Network	Q.955.3	ISDN Signaling Standard for E1 MLPP
DTMF	Dual Tone Multi-Frequency	SMEO	Small End Office
E1	European Basic Multiplex Rate (2.048 Mbps)	SS7	Signaling System 7
FR	Functional Requirement	SUT	System Under Test
IAD	Integrated Access Device	T1	Digital Transmission Link Level 1 (1.544 Mbps)
ID	Identification	T1.619a	SS7 and ISDN MLPP Signaling Standard for T1
IEEE	Institute of Electrical and Electronics Engineers	TDR	Test Discrepancy Report
ISDN	Integrated Services Digital Network	UCR	Unified Capabilities Requirements

Table 2. SUT CR and FR Status

CR/FR ID	Capability/ Function	Applicability <sup>1</sup>	UCR Reference	Status	Remarks
	<b>Assured Services Product Features a</b>	nd Capabilities			
	DSCP Packet Marking	Required	5.3.2.2.1.4	Met	
	Voice Features and Capabilities	Required	5.3.2.2.2.1	Met	
1	Public Safety Features	Required	5.3.2.2.2.2	Met	
	ASAC – Open Loop	Required	5.3.2.2.2.3	Met	
	Signaling Protocols	Required	5.3.2.2.2.3	Met	
	Signaling Performance	Required	5.3.2.2.2.4	Met	
	Registration, Authentication, and Fa	ilover			<u> </u>
2	Registration	Required	5.3.2.3.1	Met	
	Failover	Required	5.3.2.3.2	Met	
	Product Physical, Quality, and Envir				T
3	Availability	Required	5.3.2.5.2.1	Met	
3	Maximum Downtimes	Required	5.3.2.5.2.2	Met	
	Loss of Packets	Required	5.3.2.5.4	Met	
	Voice End Instruments				T
	Tones and Announcements	Required	5.3.2.6.1.1	Met	
	Audio Codecs VoIP PEI or AEI Audio Performance	Conditional <sup>2</sup>	5.3.2.6.1.2	Partially Met <sup>2</sup>	
	Requirements	Required	5.3.2.6.1.3	Met <sup>3</sup>	
4	VoIP Sampling Standard	Required	5.3.2.6.1.4	Met	
	Authentication to LSC	Required	5.3.2.6.1.5	Met	
	Analog Telephone Support	Required	5.3.2.6.1.6	Met	
	Softphones	Conditional	5.3.2.6.1.7	Met	
	ISDN BRI	Conditional	5.3.2.6.1.8	Met	
	Video End Instruments				
_	Video End Instrument	Required	5.3.2.6.2	Not Tested <sup>4</sup>	
5	Display Messages, Tones, and Announcements	Required	5.3.2.6.2.1	Not Tested <sup>4</sup>	
	Video Codecs (Including Associated Audio Codecs)	Required	5.3.2.6.2.2	Not Tested <sup>4</sup>	
	LSC Requirements	D : 1	522721	26.	l
	PBAS/ASAC Requirements	Required	5.3.2.7.2.1	Met	
	Calling Number Delivery Requirements	Required	5.3.2.7.2.2	Met	
	LSC Signaling Requirements  Service Requirements under Total Loss of	Required	5.3.2.7.2.3	Met	
	WAN Transport	Required	5.3.2.7.2.4	Met	
6	Local Location Server and Directory	Required	5.3.2.7.2.5	Met	
	LSC Transport Interface Functions	Required	5.3.2.7.2.7	Met	
	LSC to PEI, AEI, and Operator Console Status Verification	Required	5.3.2.7.2.10	Partially Met <sup>5</sup>	
	Line-Side Custom Features Interference	Conditional	5.3.2.7.2.11	Met	
	Loop Avoidance	Required	5.3.2.7.3	Met	

**Table 2. SUT CR and FR Status (continued)** 

CR/FR ID	Capability/ Function	Applicability <sup>1</sup>	UCR Reference	Status	Remarks
	<b>Call Connection Agent Requirement</b>	ts			
	CCA IWF Component	Required	5.3.2.9.2.1	Met	
	CCA MGC Component	Required	5.3.2.9.2.2	Met	
	SG Component	Conditional	5.3.2.9.2.3	Not Tested <sup>6</sup>	
	CCA-IWF Support for AS-SIP	Required	5.3.2.9.5.1	Met	
	CCA-IWF Support for SS7	Conditional	5.3.2.9.5.2	Not Tested <sup>6</sup>	
	CCA-IWF Support for PRI via MG	Required	5.3.2.9.5.3	Met	
	CCA-IWF Support for CAS Trunks via MG	Conditional	5.3.2.9.5.4	Partially Met <sup>7</sup>	
	CCA-IWF Support for PEI and AEI Signaling Protocols	Required	5.3.2.9.5.5	Met <sup>3</sup>	
_	CCA-IWF Support for VoIP and TDM Protocol Interworking	Required	5.3.2.9.5.6	Met	
7	CCA Preservation of Call Ringing State during Failure Conditions	Required	5.3.2.9.6	Met	
	CCA Interactions with Transport Interface Functions	Required	5.3.2.10.3	Met	
	CCA Interactions with the EBC	Required	5.3.2.10.4	Met	
	CCA Support for Admission Control	Required	5.3.2.10.5	Met	
	CCA Support for UFS	Required	5.3.2.10.6	Met	
	CCA Support for IA	Required	5.3.2.10.7	Met	IA is covered under separate report.
	CCA Interaction with EIs	Required	5.3.2.10.10	Partially Met <sup>3</sup>	
	CCA Support for AS Voice and Video	Required	5.3.2.10.11	Partially Met <sup>4</sup>	
	CCA Interactions with Service Control Functions	Required	5.3.2.10.12	Met	
	CCA Interworking between AS-SIP and SS7	Conditional	5.3.2.11	Not Tested <sup>6</sup>	
	MG Requirements		l		
	Role of MG In LSC	Required	5.3.2.12.3.1	Met	
	MG Support for ASAC	Required	5.3.2.12.4.1	Met	
	MG and IA Functions	Required	5.3.2.12.4.2	Met	IA is covered under separate report.
	MG Interaction with Service Control Function	Required	5.3.2.12.4.3	Met	
	MG Interactions with IP Transport Interface Functions	Required	5.3.2.12.4.4	Met	
	MG-EBC interactions	Required	5.3.2.12.4.5	Met	
8	MG IP-Based PSTN Interface Requirements	Conditional	5.3.2.12.4.7	Not Tested <sup>6</sup>	
	MG Interaction with EIs	Required	5.3.2.12.4.8	Met	
	MG support for User Features and Services	Required	5.3.2.12.4.9	Met	
	MG Interface to TDM	Required	5.3.2.12.5	Met	
	MG Interface to TDM Allied and Coalition	Conditional	5.3.2.12.6	Not Tested <sup>6</sup>	
	MG Interface to TDM PSTN in U.S.	Required	5.3.2.12.7	Met	
	MG Interfaces to TDM PSTN OCONUS	Required	5.3.2.12.8	Not Met <sup>8</sup>	
	MG Support for CCS7	Conditional	5.3.2.12.9	Not Tested <sup>6</sup>	
	MG Support for ISDN PRI Trunks	Required	5.3.2.12.10	Met	
	T T T T T T T T T T T T T T T T T T T	1			1

**Table 2. SUT CR and FR Status (continued)** 

CR/FR ID	Capability/ Function	Applicability <sup>1</sup>	UCR Reference	Status	Remarks
	MG Requirements (continued)				
	MG Support for CAS Trunks	Required	5.3.2.12.11	Partially Met <sup>7</sup>	
	MG requirements for VoIP Internal Interfaces	Required	5.3.2.12.12	Met	
8	MG Echo Cancellation	Required	5.3.2.12.13	Met	
U	MG Clock Timing	Required	5.3.2.12.14	Met	
	MGC-MG CCA Functions	Required	5.3.2.12.15	Met	
	MG ITU-T V.150.1	Required	5.3.2.12.16	Not Met <sup>9</sup>	
	MG Preservation of Call Ringing during Failure	Required	5.3.2.12.17	Met	
	SG Requirements				
9	SG and CCS7 Network Interactions	Conditional	5.3.2.13.5.1	Not Tested <sup>7</sup>	
,	SG Interactions with CCA	Conditional	5.3.2.13.5.2	Not Tested <sup>7</sup>	
	SG Interworking Functions	Conditional	5.3.2.13.5.3	Not Tested <sup>7</sup>	
	WWNDP Requirements				
10	WWNDP	Required	5.3.2.16	Met	
	DSN WWNDP	Required	5.3.2.16.1	Met	
11	Commercial Cost Avoidance				
11	Commercial Cost Avoidance	Required	5.3.2.23	Not Met <sup>10</sup>	
12	AS-SIP Based for External Devices (Voi Devices)				Receiving
	AS-SIP Requirements for External Interfaces	Conditional	5.3.2.24	Met <sup>11</sup>	
13	Precedence Call Diversion	<b>n</b>			
	Precedence call Diversion	Required	5.3.2.25	Met	
	Attendant Station Features	ъ : 1	500061	36.	
	Precedence and Preemption	Required	5.3.2.26.1	Met	
	Call Display	Required	5.3.2.26.2	Met	
	Class of Service Override	Required	5.3.2.26.3	Met	
14	Busy Override and Busy Verification	Required	5.3.2.26.4	Met	
	Night service	Required	5.3.2.26.5	Met	
	Automatic Recall of Attendant	Required	5.3.2.26.6	Met	
	Calls in Queue to the Attendant	Required	5.3.2.26.7	Met	
	AS-SIP Requirements				
	SIP Requirements for AS-SIP Signaling Appliances and AS-SIP Eis	Required	5.3.4.7	Met	
	SIP Session Keep-Alive Timer	Required	5.3.4.8	Met	
	Session Description Protocol	Required	5.3.4.9	Met	
	Precedence and Preemption	Required	5.3.4.10	Met	
	Video Telephony – General Rules	Required	5.3.4.12	Not Met <sup>4</sup>	
	Calling Services	Required	5.3.4.13	Partially Met <sup>12</sup>	
	SIP Translation Requirements for Inter-working	Required	5.3.4.14	Met	
15	AS-SIP Signaling Appliances Relevant Timers for the Terminating Gateway and	Required	5.3.4.15	Met	
	SIP Requirements for Interworking AS-SIP	Required	5.3.4.16	Met	
	Signaling Appliances Keep-Alive Timer Requirements for Interworking AS-SIP Signaling Appliances	Required	5.3.4.17	Met	
	Precedence and Preemption Extensions for	Required	5.3.4.18	Met	
	Interworking AS-SIP Signaling Appliances	_			

Table 2. SUT CR and FR Status (continued)

CR/FR ID	Capability/ Function	Applicability (See note 1.)	UCR Reference	Status	Remarks
	IPv6 Requirements				
16	Product Requirements	Required	5.3.5.4	Met	G450 supports IPv4/v6 dual stack. G650 supports IPv4 only.
	NM Requirements (LSC)				
	LSC Management Function	Required	5.3.2.7.2.6	Met	
	VVoIP NMS Interface Requirements	Required	5.3.2.4.4	Met	
17	General Management requirements	Required	5.3.2.17.2	Met	
	Requirement for FCAPS Management	Required	5.3.2.17.3	Partially Met <sup>13</sup>	
	NM requirements of Appliance Functions	Required	5.3.2.18	Met	
	Accounting Management	Required	5.3.2.19	Partially Met <sup>14</sup>	
	NM Requirements (SMEO)				
10	Physical Interface to ADIMSS	Required	5.2.8.1	Met	SUT requirement was met with an IEEE 8.02.3u Ethernet Interface.
18	Measurements and Data Generation	Required	5.2.8.2	Met	
	Fault Management	Required	5.2.8.3	Met	
	Configuration Management	Required	5.2.8.4	Met	
	Automated Message Accounting	Required	5.2.8.5	Met	
	Performance Management	Required	5.2.8.6	Met	

#### NOTES:

- 1. The annotation of 'required' refers to a high-level requirement category. The applicability of each sub-requirement is provided in Enclosure 1, Reference (d) (f).
- 2. The SUT Media Gateway and CCA do not support the ITU-T G.723.1 codec. This requirement was changed in UCR 2008 change 2 from required to conditional with an immediate applicability.
- 3. The SUT met the requirement for ITU-T H.323 PEIs, but did not meet requirements for an AEI because none were provided. The SUT was tested to UCR 2008 change 1 requirements and since the AEI requirements are new, vendor has 18 months to comply (July 2011).
- 4. The SUT supports Legacy H.320 video with ISDN PRI and BRI interfaces; however, it does not support IP video PEI or AEI EIs. This was adjudicated by DISA to have a minor operational impact because of the limited deployment of IP video.
- 5. The SUT LSC to PEI, AEI and Operator Console Status Verification do not support a default set of 5mintues. The SUT default is 20 every 20 seconds but is configurable up to 2 hours. This was adjudicated by DISA as having a minor operational impact with the recommendation to change this requirement to remove the default value as long as it is configurable.
- 6. The SUT met the IWF requirements with the T1 PRI interfaces and T1/E1 CAS. The SUT does not support SS7 or IP based PSTN interfaces which are not required for an LSC.
- 7. The SUT met all critical T1 CAS interface requirements with the following exceptions adjudicated by DISA as having a minor operational impact with no POA&M to fix it:
  - The SUT acknowledges a wink start signal greater than 350 ms. The SUT recognizes wink start signals up to 395 ms.
  - The SUT preempt signal is out of tolerance. The SUT generates a preempt signal from 336 to 339 ms. The requirement is 340 to 350 ms. Since all switches acknowledge the preempt signal from 328 to 363 ms there is no impact.
- 8. The SUT offers an E1 ETSI ISDN PRI interface however it was not tested and is not covered under this certification. The E1 ETSI ISDN PRI interface is required only for deployment in Europe. The SUT does support the conditional E1 CAS interface for Europe, and therefore the SUT is not certified for deployment in Europe.
- 9. The vendor submitted a LoC stating that the SUT does not support ITU-T V.150.1 Vendor submitted a POA&M and plans to support this feature in the next major CM release for July 2012. ITU-T V.150.1 is a new UCR 2008 change 1 requirement and the vendor has 18 months (July 2011) to comply.
- 10. The SUT do not support Commercial Cost Avoidance with the DISN RTS Routing Database or LDAP Version 3 messages for a Database Query. This is a new UCR 2008 change 1 requirement and the vendor has 18 months (July 2011) to comply. Vendor submitted a POA&M stating plans to support this feature in the next major CM release for May 2012; however DISA stipulated that they would need to see the vendor comply by September 2011.
- 11. The SUT met this requirement with the Communication Manager Messaging Voice Mail System which is listed separately on the UC APL.

# Table 2. SUT CR and FR Status (continued)

#### NOTES:

- 12. The SUT met the UCR Supplementary Services and Calling Services Requirements with the following exceptions adjudicated by DISA as having a minor operational impact with a Vendor POA&M to fix in next major CM release for July 2012:
  - Call Forwarded calls above ROUTINE ring the destination at ROUTINE cadence although the precedence level is maintained.
  - Unattended Call Transfers to the Avaya AS5300 @ precedence above ROUTINE are class marked at ROUTINE.
  - Instruments assigned the Hotline Feature cannot restrict other features (i.e. Hold, Transfer, Add hock Conferencing, etc.)
  - SUT plays Precedence Notification Tone (PNT) to an active user for only 3 seconds. The requirement is indefinite or until user hangs up.

    The SUT met the NM requirements in accordance with LICR 2008 Change 1 Section 5.3.2.17.3 with the following exception: The SUT does
- 13. The SUT met the NM requirements in accordance with UCR 2008 Change 1 Section 5.3.2.17.3 with the following exception: The SUT does not have the ability to limit calls to a destination based on percentage of calls based on vendors LoC. This discrepancy was adjudicated by DISA as having a minor operational impact with a vendor POA&M to fix in May 2012.
- 14. The SUT met the NM requirements in accordance with UCR 2008 Change 1 Section 5.3.2.19 with the following exceptions stipulated in the vendor's LoC which were adjudicated by DISA as having a minor operational impact with a vendor POA&M to fix in May 2012.
  - Does Not Comply with E-Model MOS in the Call Detail Record (CDR) Requirements
  - Does Not Support the Equipment Impairment Factor (le) and the TCLw.
  - Does Not Generate Alarms to the VVoIP EMS when E-Model R-factor record in CDR is not met.
  - Does not provide a CDR with the R-Factor and associated raw statistics

### LEGEND:

LEGENL			111.11
ADIMSS	Advanced DSN Integrated Management Support	kbps	kilobits per second
	System	LoC	Letter of Compliance
AEI	AS-SIP End Instrument	LSC	Local Session Controller
AS	Assured Services	Mbps	Megabits per second
ASAC	Assured Services Admission Control	MG	Media Gateway
AS-SIP	Assured Services Session Initiation Protocol	MGC	Media Gateway Controller
BRI	Basic Rate Interface	NM	Network Management
CAS	Channel Associated Signaling	NMS	Network Management System
CCA	Call Connection Agent	OCONUS	Outside the Continental United States
CR	Capability Requirement	PBAS	Precedence Based Assured Services
CCS7	Common Channel Signaling	PCM	Pulse Code Modulation
DISA	Defense Information Systems Agency	PEI	Proprietary End Instrument
DSCP	Differentiated Services Code Point	POA&M	Plan of Action and Milestones
DSN	Defense Switched Network	PRI	Primary Rate Interface
EBC	Edge Boundary Controller	PSTN	Public Switched Telephone Network
EI	End Instrument	SG	Signaling Gateway
FCAPS	Fault, Configuration, Accounting, Performance and	SIP	Session Initiation Protocol
	Security	SNMPv3	Simple Network Management Protocol version 3
FR	Functional Requirement	SS7	Signaling System 7
G.711	PCM of voice frequencies	SUT	System Under Test
IA	Information Assurance	T1	Digital Transmission Link Level 1 (1.544 Mbps)
IP	Internet Protocol	TDM	Time Division Multiplexing
ID	Identification	UCR	Unified Capabilities Requirements
ISDN	Integrated Services Digital Network	UFS	User Features and Services
IP	Internet Protocol	U.S.	United States
IPv4	Internet Protocol version 4	V.150	Modem over Internet Protocol Networks
IPv6	Internet Protocol version 6	VoIP	Voice over Internet Protocol
ITU-T	International Telecommunication Union -	VVoIP	Voice and Video over Internet Protocol
	Telecommunication Standardization Sector	WAN	Wide Area Network
IWF	Interworking Function	WWNDP	Worldwide Numbering and Dialing Plan

- 5. No detailed test report was developed in accordance with the Program Manager's request. JITC distributes interoperability information via the JITC Electronic Report Distribution (ERD) system, which uses Unclassified-But-Sensitive Internet Protocol Router Network (NIPRNet) e-mail. More comprehensive interoperability status information is available via the JITC System Tracking Program (STP). The STP is accessible by .mil/gov users on the NIPRNet at https://stp.fhu.disa.mil. Test reports, lessons learned, and related testing documents and references are on the JITC Joint Interoperability Tool (JIT) at http://jit.fhu.disa.mil (NIPRNet). Information related to DSN testing is on the Telecom Switched Services Interoperability (TSSI) website at http://jitc.fhu.disa.mil/tssi. All associated data is available on the DISA Unified Capability Coordination Office (UCCO) website located at http://www.disa.mil/ucco/.
- 6. The JITC point of contact is Capt Stéphane Arsenault, DSN 879-5269, commercial (520) 538-5269, FAX DSN 879-4347, or e-mail to stephane.arsenault@disa.mil. JITC's mailing address is P.O. Box 12798, Fort Huachuca, AZ 85670-2798. The UCCO tracking number for the SUT as an LSC is 1009101 and as a SMEO is 1020101.

FOR THE COMMANDER:

Enclosure a/s

for BRADLEY A. CLARK

Chief

Battlespace Communications Portfolio

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Defense Intelligence Agency

National Security Agency, DT

Defense Information Systems Agency, TEMC

Office of Assistant Secretary of Defense (NII)/DOD CIO

U.S. Joint Forces Command, Net-Centric Integration, Communication, and Capabilities

Division, J68

Defense Information Systems Agency, GS23

### ADDITIONAL REFERENCES

- (c) Joint Interoperability Test Command, "Special Interoperability Test Certification of the Avaya Aura S8800 and Hewlett Packard (HP) DL-360 G7 with Release (Rel.) Communication Manager (CM) 6.0.1 (00.1.510.1 Service Pack 19211)," 2 September 2011
- (d) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008, Change 1," 22 January 2010
- (e) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008, Change 2," 31 December 2010
- (f) Office of the Assistant Secretary of Defense, "Department of Defense Unified Capabilities Requirements 2008," 31 December 2008
- (g) Joint Interoperability Test Command, "Unified Capabilities Test Plan (UCTP)," Draft
- (h) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of Avaya S8800 and Hewlett Packard (HP) DL-360 G7 Local Session Controller (LSC) with Aura Communication Manager (CM) Release (Rel.) 6.0.1 (Tracking Number 1009101)," 10 January 2012
- (i) Joint Interoperability Test Command, "Information Assurance (IA) Assessment of Avaya S8800 and Hewlett Packard (HP) DL-360 G7 Small End Office (SMEO) with Aura Communication Manager (CM) Release (Rel.) 6.0.1, (Tracking Number 1020101)," 28 June 2011
- (j) Joint Interoperability Test Command, "Defense Switched Network Generic Switch Test Plan (GSTP), Change 2," 2 October 2006